

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) LO_Helios PCT

Box No. I TITLE OF INVENTION

Verfahren zur Herstellung einer Multilayerschicht und Vorrichtung zur Durchführung des Verfahrens

Box No. II APPLICANT

This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

LEYBOLD OPTICS GMBH

Siemensstraße 88

63755 Alzenau

Telephone No.
06023/500-0

Faximile No.
06023/500-150

Teleprinter No.

Applicant's registration No. with the Office

State (that is, country) of nationality:

DE

State (that is, country) of residence:

DE

This person is applicant all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Scherer, Michael
Bergwerkstraße 2

D-63796 Kahl

This person is:

applicant only

applicant and inventor

inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

DE

State (that is, country) of residence:

DE

This person is applicant all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

agent

common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

Dr. Bernd Michael Pohlmann
Reinhardt & Pohlmann Partnerschaft
Günthersburgallee 40

D-60316 Frankfurt am Main

Telephone No.
069/ 94 41 93 80

Faximile No.
069/ 94 41 93 81

Teleprinter No.

Agent's registration No. with the Office
120 110

Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Pistner, Jürgen
Am Erlenborn 13 b

D-63755 Alzenau-Michelbach

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:
DEState (that is, country) of residence:
DE

This person is applicant for the purposes of: all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Lehnert, Walter
Breslauer Straße 26

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

D-63571 Gelnhausen

Applicant's registration No. with the Office

State (that is, country) of nationality:
DEState (that is, country) of residence:
DE

This person is applicant for the purposes of: all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

Hagedorn, Harro
Hoherodskopfstraße 50

D-60435 Frankfurt am Main

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:
DEState (that is, country) of residence:
DE

This person is applicant for the purposes of: all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

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Deppisch, Gerd
Rhönstraße 56

D-63743 Aschaffenburg

This person is:

applicant only
 applicant and inventor
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:
DEState (that is, country) of residence:
DE

This person is applicant for the purposes of: all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on another continuation sheet.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

<p>Name and address: (<i>Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.</i>)</p> <p>Röder, Mario Leipziger Straße 13 D-63571 Gelnhausen</p>		<p>This person is:</p> <p><input type="checkbox"/> applicant only <input checked="" type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (<i>If this check-box is marked, do not fill in below.</i>)</p>
		<p>Applicant's registration No. with the Office</p>
<p>State (<i>that is, country</i>) of nationality: DE</p>	<p>State (<i>that is, country</i>) of residence: DE</p>	
<p>This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input type="checkbox"/> all designated States except the United States of America</p>		<p><input checked="" type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box</p>
<p>Name and address: (<i>Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.</i>)</p>		<p>This person is:</p> <p><input type="checkbox"/> applicant only <input type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (<i>If this check-box is marked, do not fill in below.</i>)</p>
		<p>Applicant's registration No. with the Office</p>
<p>State (<i>that is, country</i>) of nationality:</p>	<p>State (<i>that is, country</i>) of residence:</p>	
<p>This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input type="checkbox"/> all designated States except the United States of America</p>		<p><input type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box</p>
<p>Name and address: (<i>Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.</i>)</p>		<p>This person is:</p> <p><input type="checkbox"/> applicant only <input type="checkbox"/> applicant and inventor <input type="checkbox"/> inventor only (<i>If this check-box is marked, do not fill in below.</i>)</p>
		<p>Applicant's registration No. with the Office</p>
<p>State (<i>that is, country</i>) of nationality:</p>	<p>State (<i>that is, country</i>) of residence:</p>	
<p>This person is applicant for the purposes of: <input type="checkbox"/> all designated States <input type="checkbox"/> all designated States except the United States of America</p>		<p><input type="checkbox"/> the United States of America only <input type="checkbox"/> the States indicated in the Supplemental Box</p>
<p><input type="checkbox"/> Further applicants and/or (further) inventors are indicated on another continuation sheet.</p>		

Box No. V DESIGNATION OF STATES

Mark the applicable check-boxes below; at least one must be marked.

The following designations are hereby made under Rule 4.9(a):

Regional Patent

AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZM Zambia, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT (if other kind of protection or treatment desired, specify on dotted line)

EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT

EP European Patent: AT Austria, BE Belgium, BG Bulgaria, CH & LI Switzerland and Liechtenstein, CY Cyprus, CZ Czech Republic, DE Germany, DK Denmark, EE Estonia, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, SI Slovenia, SK Slovakia, TR Turkey, and any other State which is a Contracting State of the European Patent Convention and of the PCT

OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GQ Equatorial Guinea, GW Guiné-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

<input type="checkbox"/> AE United Arab Emirates	<input type="checkbox"/> CM Gambia	<input type="checkbox"/> NZ New Zealand
<input type="checkbox"/> AG Antigua and Barbuda	<input type="checkbox"/> HR Croatia	<input type="checkbox"/> OM Oman
<input type="checkbox"/> AL Albania	<input type="checkbox"/> HU Hungary	<input type="checkbox"/> PH Philippines
<input type="checkbox"/> AM Armenia	<input type="checkbox"/> ID Indonesia	<input type="checkbox"/> PL Poland
<input type="checkbox"/> AT Austria	<input type="checkbox"/> IL Israel	<input type="checkbox"/> PT Portugal
<input type="checkbox"/> AU Australia	<input type="checkbox"/> IN India	<input type="checkbox"/> RO Romania
<input type="checkbox"/> AZ Azerbaijan	<input type="checkbox"/> IS Iceland	<input type="checkbox"/> RU Russian Federation
<input type="checkbox"/> BA Bosnia and Herzegovina	<input checked="" type="checkbox"/> JP Japan	
<input type="checkbox"/> BB Barbados	<input type="checkbox"/> KE Kenya	<input type="checkbox"/> SC Seychelles
<input type="checkbox"/> BG Bulgaria	<input type="checkbox"/> KG Kyrgyzstan	<input type="checkbox"/> SD Sudan
<input type="checkbox"/> BR Brazil	<input type="checkbox"/> KP Democratic People's Republic of Korea	<input type="checkbox"/> SE Sweden
<input type="checkbox"/> BY Belarus	<input checked="" type="checkbox"/> KR Republic of Korea	<input type="checkbox"/> SG Singapore
<input type="checkbox"/> BZ Belize		<input type="checkbox"/> SK Slovakian
<input type="checkbox"/> CA Canada	<input type="checkbox"/> KZ Kazakhstan	<input type="checkbox"/> SL Sierra Leone
<input type="checkbox"/> CH & LI Switzerland and Liechtenstein	<input type="checkbox"/> LC Saint Lucia	<input type="checkbox"/> TJ Tajikistan
<input checked="" type="checkbox"/> CN China	<input type="checkbox"/> LK Sri Lanka	<input type="checkbox"/> TM Turkmenistan
<input type="checkbox"/> CO Colombia	<input type="checkbox"/> LR Liberia	<input type="checkbox"/> TN Tunisia
<input type="checkbox"/> CR Costa Rica	<input type="checkbox"/> LS Lesotho	<input type="checkbox"/> TR Turkey
<input type="checkbox"/> CU Cuba	<input type="checkbox"/> LT Lithuania	<input type="checkbox"/> TT Trinidad and Tobago
<input type="checkbox"/> CZ Czech Republic	<input type="checkbox"/> LU Luxembourg	<input type="checkbox"/> TZ United Republic of Tanzania
<input type="checkbox"/> DE Germany	<input type="checkbox"/> LV Latvia	<input type="checkbox"/> UA Ukraine
<input type="checkbox"/> DK Denmark	<input type="checkbox"/> MA Morocco	<input type="checkbox"/> UG Uganda
<input type="checkbox"/> DM Dominica	<input type="checkbox"/> MD Republic of Moldova	<input checked="" type="checkbox"/> US United States of America
<input type="checkbox"/> DZ Algeria		
<input type="checkbox"/> EC Ecuador	<input type="checkbox"/> MG Madagascar	<input type="checkbox"/> UZ Uzbekistan
<input type="checkbox"/> EE Estonia	<input type="checkbox"/> MK The former Yugoslav Republic of Macedonia	<input type="checkbox"/> VC Saint Vincent and the Grenadines
<input type="checkbox"/> ES Spain	<input type="checkbox"/> MN Mongolia	<input type="checkbox"/> VN Viet Nam
<input type="checkbox"/> FI Finland	<input type="checkbox"/> MW Malawi	<input type="checkbox"/> YU Yugoslavia
<input type="checkbox"/> GB United Kingdom	<input type="checkbox"/> MX Mexico	<input type="checkbox"/> ZA South Africa
<input type="checkbox"/> GD Grenada	<input type="checkbox"/> MZ Mozambique	<input type="checkbox"/> ZM Zambia
<input type="checkbox"/> GE Georgia	<input type="checkbox"/> NO Norway	<input type="checkbox"/> ZW Zimbabwe
<input type="checkbox"/> GH Ghana		

Check-boxes below reserved for designating States which have become party to the PCT after issuance of this sheet:

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Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application: regional Office	international application: receiving Office
item (1) 04.12.2002	DE 102 56 877.4-45	Deutschland		
item (2) 13.10.2003	DE 103 47 521.4	Deutschland		
item (3)				
item (4)				
item (5)				

 Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (*only if the earlier application was filed with the Office which for the purposes of this International application is the receiving Office*) identified above as:

all items item (1) item (2) item (3) item (4) item (5) other, see
Supplemental Box

* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.1(b)(ii)). . . .

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (*if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used*):

ISA / EF

Request to use results of earlier search; reference to that search (*if an earlier search has been carried out by or requested from the International Searching Authority*):

Date (day/month/year)

Number

Country (for regional Office)

Box No. VIII DECLARATIONS

The following declarations are contained in Boxes Nos. VIII (i) to (v) (*mark the applicable check-boxes below and indicate in the right column the number of each type of declaration*):

Number of declarations

<input type="checkbox"/> Box No. VIII (i)	Declaration as to the identity of the inventor	:
<input type="checkbox"/> Box No. VIII (ii)	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	:
<input type="checkbox"/> Box No. VIII (iii)	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	:
<input type="checkbox"/> Box No. VIII (iv)	Declaration of inventorship (only for the purposes of the designation of the United States of America)	:
<input type="checkbox"/> Box No. VIII (v)	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	:

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BEST AVAILABLE COPY

Box No. IX CHECK LIST; LANGUAGE OF FILING

This international application contains:	This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):		Number of items
(a) in paper form, the following number of sheets:			
request (including declaration sheets) : 6	<input checked="" type="checkbox"/> fee calculation sheet		:
description (excluding sequence listings and/or tables related thereto) : 22	<input type="checkbox"/> original separate power of attorney		:
claims : 10	<input type="checkbox"/> original general power of attorney		:
abstract : 2	<input type="checkbox"/> copy of general power of attorney; reference number, if any:		:
drawings : 14	<input type="checkbox"/> statement explaining lack of signature		:
Sub-total number of sheets : 54	<input type="checkbox"/> priority document(s) identified in Box No. VI as item(s):		:
sequence listings :	<input type="checkbox"/> translation of international application into (language):		:
tables related thereto :	<input type="checkbox"/> separate indications concerning deposited microorganism or other biological material		:
(for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c) below)	<input type="checkbox"/> sequence listings in computer readable form (indicate type and number of carriers)		:
Total number of sheets : 54	(i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13(ter) only (and not as part of the international application)		:
(b) <input type="checkbox"/> only in computer readable form (Section 801(a)(i))	(ii) <input type="checkbox"/> (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13(ter)		:
(i) <input type="checkbox"/> sequence listings	(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listings mentioned in left column		:
(ii) <input type="checkbox"/> tables related thereto			
(c) <input type="checkbox"/> also in computer readable form (Section 801(a)(ii))			
(i) <input type="checkbox"/> sequence listings	10. <input type="checkbox"/> tables in computer readable form related to sequence listings (indicate type and number of carriers)		:
(ii) <input type="checkbox"/> tables related thereto	(i) <input type="checkbox"/> copy submitted for the purposes of international search under Section 802(b-quarter) only (and not as part of the international application)		:
Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the	(ii) <input type="checkbox"/> (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quarter)		:
<input type="checkbox"/> sequence listings:	(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column		:
<input type="checkbox"/> tables related thereto:			
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)	11. <input type="checkbox"/> other (specify):		:

Figure of the drawings which should accompany the abstract: 1

Language of filing of the international application: deutsch

Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

Dr. Bernd Michael Pohlmann

For receiving Office use only		
1. Date of actual receipt of the purported international application:		2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:		
4. Date of timely receipt of the required corrections under PCT Article 11(2):		
5. International Searching Authority (if two or more are competent): ISA /		6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

This sheet is not part of and does not count as a sheet of the international application.

PCT

FEE CALCULATION SHEET
Annex to the Request

For receiving Office use only

International Application No.

Applicant's or agent's
file reference LO_Helios PCT

Date stamp of the receiving Office

Applicant

LEYBOLD OPTICS

CALCULATION OF PRESCRIBED FEES

1. TRANSMITTAL FEE

100,00 € T

2. SEARCH FEE

945,00 € S

International search to be carried out by

(If two or more International Searching Authorities are competent to carry out the international search, indicate the name of the Authority which is chosen to carry out the international search.)

3. INTERNATIONAL FEE

Basic Fee

Where items (b) and/or (c) of Box No. IX apply, enter Sub-total number of sheets }
Where items (b) and (c) of Box No. IX do not apply, enter Total number of sheets }

b1 first 30 sheets 444,00 € b1

b2 14 x 10,00 € = 140,00 € b2
number of sheets in excess of 30 fee per sheet

b3 additional component (only if sequence listings and/or tables related thereto are filed in computer readable form under Section 801(a)(i), or both in that form and on paper, under Section 801(a)(ii)):

400 x fee per sheet = b3

Add amounts entered at b1, b2 and b3 and enter total at B 584,00 € B

Designation Fees

The international application contains 5 designations.

5 x 96,00 € = 480,00 € D
number of designation fees payable (maximum 5) amount of designation fee

Add amounts entered at B and D and enter total at I 1.064,00 € I

(Applicants from certain States are entitled to a reduction of 75% of the international fee. Where the applicant is (or all applicants are) so entitled, the total to be entered at I is 25% of the sum of the amounts entered at B and D.)

4. FEE FOR PRIORITY DOCUMENT (if applicable)

5. TOTAL FEES PAYABLE

Add amounts entered at T, S, I and P, and enter total in the TOTAL box

2.109,00 €

TOTAL

The designation fees are not paid at this time.

MODE OF PAYMENT

authorization to charge deposit account (see below) postal money order cash coupons
 cheque bank draft revenue stamps other (specify):

AUTHORIZATION TO CHARGE (OR CREDIT) DEPOSIT ACCOUNT

(This mode of payment may not be available at all receiving Offices)

Receiving Office: RO:

Authorization to charge the total fees indicated above.

Deposit Account No.:

(This check-box may be marked only if the conditions for deposit accounts of the receiving Office so permit) Authorization to charge any deficiency or credit any overpayment in the total fees indicated above.

Date: 02.12.2003

Authorization to charge the fee for priority document.

Name: Dr. Bernd Michael Pohlmann

Signature: 